

## **AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions and listings of claims in the application:

Claims 1-36 (Cancelled).

Claim 37 (Currently Amended): A transgenic mouse whose genome comprises a homozygous disruption of the endogenous  $\alpha$ -TTP gene, wherein  $\alpha$ -TTP ~~expression is inhibited such that~~ is not expressed and the transgenic mouse does not exhibit detectable plasma levels of  $\alpha$ -tocopherol.

Claim 38 (Previously Presented): The transgenic mouse according to claim 37, wherein the mouse is a pregnant female, and wherein the pregnant female fails to maintain pregnancy as assayed by the fetal resorption-gestation test.

Claim 39 (Previously Presented): The transgenic mouse according to claim 37, wherein the disrupted endogenous  $\alpha$ -TTP gene comprises an inserted marker gene.

Claim 40 (Previously Presented): A method for producing the transgenic mouse according to claim 37, comprising:

(a) inserting a mouse embryonic stem cell into an embryo taken from a pregnant female to form a chimeric embryo, wherein the embryonic stem cell comprises a disrupted endogenous  $\alpha$ -TTP gene;

- (b) transferring the chimeric embryo into the uterus of a female mouse;
- (c) allowing the embryo to undergo full fetal development to term to obtain a mouse comprising the disrupted endogenous  $\alpha$ -TTP gene;
- (d) crossing a male mouse comprising the disrupted endogenous  $\alpha$ -TTP gene with a female mouse comprising the disrupted endogenous  $\alpha$ -TTP gene; and
- (e) screening the progeny obtained from the cross to identify the mouse according to claim 37.

Claim 41-45 (Cancelled).

Claim 46 (Currently Amended): A transgenic mouse whose genome comprises a heterozygous disruption of the endogenous  $\alpha$ -TTP gene, wherein  $\alpha$ -TTP ~~expression is~~ not expressed from the disrupted  $\alpha$ -TTP allele ~~is inhibited such that~~ and the transgenic mouse exhibits about one-half the plasma level of  $\alpha$ -tocopherol of a corresponding mouse that does not comprise a disrupted endogenous  $\alpha$ -TTP gene when the mice are fed with a diet comprising the same amount of  $\alpha$ -tocopherol.

Claim 47 (Previously Presented): The transgenic mouse according to claim 46, wherein the disrupted endogenous  $\alpha$ -TTP gene comprises an inserted marker gene.

Claim 48 (Previously Presented): A method for producing the transgenic mouse according to claim 46, comprising:

(a) inserting a mouse embryonic stem cell into an embryo taken from a pregnant female to form a chimeric embryo, wherein the embryonic stem cell comprises a disrupted endogenous  $\alpha$ -TTP gene;

(b) transferring the chimeric embryo into the uterus of a female mouse;

(c) allowing the embryo to undergo full fetal development to term to obtain a mouse comprising the disrupted endogenous  $\alpha$ -TTP gene;

(d) crossing a mouse comprising the disrupted endogenous  $\alpha$ -TTP gene with a second mouse; and

(e) screening the progeny obtained from the cross to identify the mouse according to claim 46.

Claims 49-51 (Cancelled).